

Mr. Mic Dwyer
Stoneco, Inc.
P.O. Box 29A
Maumee, OH 43537

Re: SMF 003-9968
First Significant Modification to FESOP 003-5809
Plt ID 003-03281

Dear Mr. Dwyer:

Stoneco, Inc., was issued a Federally Enforceable State Operating Permit (FESOP) on December 13, 1996, for a stationary drum mix asphalt plant located at 7320 Lower Huntington Road, Fort Wayne, Indiana. On July 23, 1998, the Office of Air Management (OAM) received a letter requesting that modifications be made to the FESOP to replace the existing 91 million Btu per hour dryer burner with a new 135 million Btu per hour burner.

Based on the written request from Stoneco, Inc., and pursuant to the provisions of 326 IAC 2-8-11 (FESOP: Permit Modification), a significant modification to this permit is hereby approved as discussed in the attached Technical Support Document and as described herein (bold emphasis added to new language):

1. The descriptive information about the dryer burner in Item (a) of Section A.2 on Page 4 of 31 of the FESOP shall be revised to reflect the size of the replacement burner as follows:
 - (a) one (1) aggregate drum mix dryer (ID No. EU-02), with a maximum capacity of 325 tons per hour; equipped with one (1) natural gas fired dryer burner with a maximum heat input of ~~94~~ **135** million British thermal units per hour, using liquefied petroleum gas (LPG), No. 1 distillate fuel oil, No. 2 distillate fuel oil, No. 4 residual fuel oil, No. 5 residual fuel oil, No. 6 residual fuel oil and re-refined waste oil as back-up fuels; with one (1) baghouse (ID No. B-1) for particulate matter control, exhausting to one (1) stack (ID No. SV-1);
2. The descriptive information about the dryer burner in Item (a) of Section D.1 on Page 20 of 31 of the FESOP shall be revised to reflect the size of the replacement burner as follows:
 - (a) one (1) aggregate drum mix dryer (ID No. EU-02), with a maximum capacity of 325 tons per hour; equipped with one (1) natural gas fired dryer burner with a maximum heat input of ~~94~~ **135** million British thermal units per hour, using liquefied petroleum gas (LPG), No. 1 distillate fuel oil, No. 2 distillate fuel oil, No. 4 residual fuel oil, No. 5 residual fuel oil, No. 6 residual fuel oil and re-refined waste oil as back-up fuels; with one (1) baghouse (ID No. B-1) for particulate matter control, exhausting to one (1) stack (ID No. SV-1); and

3. The first paragraph of Condition D.1.4 on Page 20 of 31 of the FESOP shall be revised to reflect the size of the replacement burner as follows:

Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 94 **135** million British thermal units per hour burner for the aggregate dryer shall be limited to 1.6 pounds per million British thermal units heat input for residual oils, and shall be limited to 0.5 pounds per million British thermal units for distillate oil combustion. This is equivalent to the following maximum allowable sulfur contents of the following fuels: No. 1 distillate fuel oil (0.48 percent maximum sulfur content), No. 2 distillate fuel oil (0.49 percent maximum sulfur content), No. 4 residual oil (1.56 percent maximum sulfur content), No. 5 residual fuel oil (1.66 percent maximum sulfur content), No. 6 residual fuel oil (1.66 percent maximum sulfur content), and re-refined waste oil (1.47 percent maximum sulfur content).

4. A new Condition, D.1.5a, has been added to the FESOP as Page 20a of 31 which limits the combustion of natural gas fuel and natural gas equivalents in the aggregate dryer burner such that the total nitrogen oxides (NO_x) potential to emit (PTE) of the source is below the Part 70 significant level. The language of Condition D.1.5a is as follows:

D.1.5a Natural Gas Usage and Equivalents

The consumption of natural gas fuel plus equivalent natural gas fuel consumption from back-up fuels, shall be limited to 356.7 million cubic feet (MMCF) per twelve (12) consecutive month period. For the purposes of calculating equivalent natural gas consumption from back-up fuels, the following conversion factors shall be utilized:

- (1) 1 kgal of No. 2 distillate fuel oil = 0.1265 million cubic feet of natural gas,**
- (2) 1 kgal of liquefied petroleum gas = 0.0273 million cubic feet of natural gas**
- (3) 1 kgal of No. 1 distillate fuel oil = 0.0437 million cubic feet of natural gas**
- (4) 1 kgal of No. 4 residual fuel oil = 0.0855 million cubic feet of natural gas**
- (5) 1 kgal of No. 5 residual fuel oil = 0.0855 million cubic feet of natural gas**
- (6) 1 kgal of No. 6 residual fuel oil = 0.0855 million cubic feet of natural gas**
- (7) 1 kgal of waste oil (No. 4 recycled) = 0.0346 million cubic feet of natural gas**

Therefore, the requirements of 326 IAC 2-7 will not apply.

5. The equivalence ratios of natural gas and liquefied petroleum gas based on SO₂ emissions contained in Condition D.1.5 on Page 21 of 31 of the FESOP have been removed because their effect on the limited PTE is negligible. Additionally, the period of compliance for the limit has been changed from a daily basis to a 12 consecutive month basis to be consistent with the new Condition D.1.5a added above. The changes to Condition D.1.5 shall be as follows:

D.1.5 No. 2 Distillate Fuel Oil Usage and Equivalents

The consumption of No. 2 distillate fuel oil (not to exceed 0.49% sulfur content) plus equivalent No. 2 distillate fuel oil consumption from back-up fuels, shall be limited to 2,764,300 gallons per ~~365-day period, rolled on a daily basis~~ per twelve (12) consecutive month period. For the purposes of calculating equivalent No. 2 distillate fuel oil consumption from back-up fuels, the following conversion factors shall be utilized:

- 1) ~~1 million cubic feet of natural gas = 0.008848 kgal of No. 2 distillate fuel oil;~~**

- 2) ~~1 kgal of liquefied petroleum gas (not to exceed 0.01% sulfur) = 0.0000128 kgal of No. 2 distillate fuel oil~~
- (13) 1 kgal of No. 1 distillate fuel oil (not to exceed 0.48% sulfur) = 0.9796 kgal of No. 2 distillate fuel oil
- (24) 1 kgal of No. 4 residual fuel oil (not to exceed 0.70% sulfur) = 1.509 kgal of No. 2 distillate fuel oil
- (35) 1 kgal of No. 5 residual fuel oil (not to exceed 0.87% sulfur) = 1.963 kgal of No. 2 distillate fuel oil
- (46) 1 kgal of No. 6 residual fuel oil (not to exceed 1.34% sulfur) = 3.024 kgal of No. 2 distillate fuel oil
- (57) 1 kgal of waste oil (No. 4 recycled) (not to exceed 0.70% sulfur) = 1.479 kgal of No. 2 fuel oil

6. Condition D.1.15 on Page 23 of 31 of the FESOP has been revised to specify the additional record keeping associated with the new natural gas and natural gas equivalent limitation. The revised condition shall be as follows:

D.1.15 ~~No. 2 Distillate Fuel Oil Usage and Equivalents~~

- (a) Complete and sufficient records shall be kept to establish compliance with **the natural gas and natural gas equivalents usage limit**, the No. 2 distillate fuel oil and equivalents usage limits, and sulfur dioxide emission limits established in this permit and **these records shall** contain a minimum of the following:
- (1) Calendar dates covered in the compliance determination period;
 - (2) ~~Daily~~ **Monthly natural gas usage plus equivalent natural gas usage from back-up fuels and monthly** No. 2 distillate fuel oil usage plus equivalent No. 2 fuel oil usage from back-up fuels, and sulfur content;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and
 - (4) Fuel supplier certifications.
- (b) The supplier certification shall contain, as a minimum, the following:
- (1) The name of the supplier; and
 - (2) A statement from the oil supplier that certifies the sulfur content and heat content of the fuel oil.

7. Condition D.1.16 on Page 24 of 31 of the FESOP has been revised to require quarterly reporting requirements associated with the new natural gas and natural gas equivalent limitation. The revised condition shall be as follows:

D.1.16 Quarterly Reporting

A quarterly summary to document compliance with operation Conditions D.1.5 and D.1.5a, shall be submitted to the address(es) listed in Section C.16 General Reporting Requirements, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported.

8. Pursuant to 326 IAC 2-1 (Construction and operating permit requirements), the following five (5) construction conditions (D.1.17 through D.1.21) are applicable to the new dryer burner and have been added to Section D.1 as Page 24a:

General Construction Conditions [326 IAC 2-1-3.2]

D.1.17 General Rule Applicability

This permit to construct the 135 MMBtu per hour dryer burner does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

D.1.18 Effective Date of the Permit [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

D.1.19 Revocation of Permits [326 IAC 2-1-9(b)]

Pursuant to 326 IAC 2-1-9(b) (Revocation of Permits), IDEM, OAM, may revoke this section of the approved permit if construction of the 135 MMBtu per hour dryer burner is not commenced within eighteen (18) months after receipt of this permit or if construction is suspended for a continuous period of one (1) year or more.

D.1.20 Modification of Construction Conditions

All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

D.1.21 First Time Operation Permit [326 IAC 2-1-4]

This document shall also become the first-time operation permit for the 135 MMBtu per hour dryer burner, pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to:

Indiana Department of Environmental Management
Permit Administration & Development Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

verifying that the facilities were constructed as proposed in the application. The facilities covered in this section of this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
 - (c) The permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this permit.
- 9. The quarterly reporting form on Page 30 of 31 of the FESOP has been revised to reflect the new burner size, the changes to the No. 2 fuel oil equivalents, and the change of compliance determination period. In addition, a new quarterly reporting form has been added as Page 30a of 31 for reporting natural gas and natural gas equivalent usage.
- 10. An Affidavit of Construction for the new dryer burner has been included with the modified FESOP pages.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification to the front of the original FESOP.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Janusz Johnson, OAM at the above address; or by phone at 317-232-8325 or 1800-451-6027 (dial "0" and ask for ext. 2-8325).

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

JKJ

Attachments: TSD - 4 pages
TSD Appendix A - 5 pages
Modified FESOP pages - 10 pages + Affidavit

cc: File - Allen County
Air Compliance Section Inspector - Doyle Houser
Compliance Data Section - Jerri Curless
Administrative and Development - Janet Mobley
Technical Support and Modeling - Nancy Landau

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
OFFICE OF AIR MANAGEMENT**

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 1-800-451-6027

**Stoneco, Inc. Fort Wayne Drum Asphalt Plant
7320 Lower Huntington Road
Fort Wayne, Indiana 46809**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the facilities listed in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 and contains the conditions and provisions specified in 326 IAC 2-8 and 40 CFR Part 70.6 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) and IC 13-15 and IC 13-17 (prior to July 1, 1996, IC 13-1-1-4 and IC 13-7-10).

Operation Permit No.: F003-5809-03281	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date: December 13, 1996
First Significant Modification: SMF003-9968	Pages Affected: 4, 20, 20a, 21, 23, 24, 24a, 30, and 30a
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

SECTION A SOURCE SUMMARY

A.1 General Information

The Permittee owns and operates a drum hot mix asphalt plant.

Responsible Official: Mic Dwyer
Source Address: 7320 Lower Huntington Road, Fort Wayne, Indiana 46809
Mailing Address: 201 South Thomas Road, Fort Wayne, Indiana 46808
SIC Code: 2951
County Location: Allen
County Status: Attainment for all criteria pollutants
Source Status: Synthetic Minor Source, FESOP Program

A.2 Emission Units and Pollution Control Summary

The stationary source consists of the following emission units and pollution control devices:

- (a) one (1) aggregate drum mix dryer (ID No. EU-02), with a maximum capacity of 325 tons per hour; equipped with one (1) natural gas fired dryer burner with a maximum heat input of 135 million British thermal units per hour, using liquefied petroleum gas (LPG), No. 1 distillate fuel oil, No. 2 distillate fuel oil, No. 4 residual fuel oil, No. 5 residual fuel oil, No. 6 residual fuel oil and re-refined waste oil as back-up fuels; with one (1) baghouse (ID No. B-1) for particulate matter control, exhausting to one (1) stack (ID No. SV-1);
- (b) feeding, conveying and loading operations, processing a maximum of 325 tons per hour;
- (c) cold-mix (stockpile mix) asphalt manufacturing operations;
- (d) one (1) 18,000 gallon asphalt cement storage tank (ID No. T-01);
- (e) one (1) 20,000 gallon asphalt cement storage tank (ID No. T-02); and
- (f) one (1) 22,000 gallon fuel oil storage tank (ID No. T-03).

A.3 Insignificant Activities

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(20):

- (a) one (1) hot oil heater, with a maximum heat input of 1.3 million British thermal units per hour, firing No. 2 distillate fuel oil with natural gas and LPG as back-up fuels, exhausting to one (1) stack;
- (b) sand, crushed stone and reclaimed asphalt pavement storage piles with a maximum total storage capacity of 60,000 tons;
- (c) paved and unpaved roadways; and
- (d) one (1) materials testing lab.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

SECTION D.1 FACILITY OPERATION CONDITIONS

- (a) one (1) aggregate drum mix dryer (ID No. EU-02), with a maximum capacity of 325 tons per hour; equipped with one (1) natural gas fired dryer burner with a maximum heat input of 135 million British thermal units per hour, using liquefied petroleum gas (LPG), No. 1 distillate fuel oil, No. 2 distillate fuel oil, No. 4 residual fuel oil, No. 5 residual fuel oil, No. 6 residual fuel oil and re-refined waste oil as back-up fuels; with one (1) baghouse (ID No. B-1) for particulate matter control, exhausting to one (1) stack (ID No. SV-1); and
- (b) feeding, conveying and loading operations, processing a maximum of 325 tons per hour;

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3] [326 IAC 12] [40 CFR Part 60.90]

D.1.1 Particulate Matter

State: Pursuant to 326 IAC 6-3 (Process Operations), the particulate matter emissions from the mixing and drying operations (ID No. EU-02) shall not exceed 55.0 pounds per hour.

Federal: Pursuant to 326 IAC 12, (40 CFR Part 60.90, Subpart I) "Standards of Performance for Hot Mix Asphalt Facilities", the particulate matter emissions from the mixing and drying operations shall be limited to 0.04 grains per dry standard cubic foot.

D.1.2 Particulate Matter with Aerodynamic Diameter Less Than or Equal to 10 Micrometers (PM₁₀)

Pursuant to 326 IAC 2-8-4, PM₁₀ emissions from the aggregate mixing and drying operation (ID No. EU-02) shall not exceed 21.9 pounds per hour, including both filterable and condensable fractions. Compliance with this limit will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

D.1.3 Opacity

Pursuant to 326 IAC 12, (40 CFR Part 60.92, Subpart I) "Standards of Performance for Hot Mix Asphalt Facilities", the mixing and drying operations shall not discharge or cause the discharge into the atmosphere any gases which exhibit 20 percent opacity or greater.

D.1.4 Sulfur Dioxide (SO₂)

Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), sulfur dioxide emissions from the 135 million British thermal units per hour burner for the aggregate dryer shall be limited to 1.6 pounds per million British thermal units heat input for residual oils, and shall be limited to 0.5 pounds per million British thermal units for distillate oil combustion. This is equivalent to the following maximum allowable sulfur contents of the following fuels: No. 1 distillate fuel oil (0.48 percent maximum sulfur content), No. 2 distillate fuel oil (0.49 percent maximum sulfur content), No. 4 residual oil (1.56 percent maximum sulfur content), No. 5 residual fuel oil (1.66 percent maximum sulfur content), No. 6 residual fuel oil (1.66 percent maximum sulfur content), and re-refined waste oil (1.47 percent maximum sulfur content).

Pursuant to 326 IAC 7-1.1-2, this sulfur dioxide limit applies at all times including periods of startup, shutdown, and malfunction.

D.1.5a Natural Gas Usage and Equivalents

The consumption of natural gas fuel plus equivalent natural gas fuel consumption from back-up fuels, shall be limited to 356.7 million cubic feet (MMCF) per twelve (12) consecutive month period. For the purposes of calculating equivalent natural gas consumption from back-up fuels, the following conversion factors shall be utilized:

- (1) 1 kgal of No. 2 distillate fuel oil = 0.1265 million cubic feet of natural gas,
- (2) 1 kgal of liquefied petroleum gas = 0.0273 million cubic feet of natural gas
- (3) 1 kgal of No. 1 distillate fuel oil = 0.0437 million cubic feet of natural gas
- (4) 1 kgal of No. 4 residual fuel oil = 0.0855 million cubic feet of natural gas
- (5) 1 kgal of No. 5 residual fuel oil = 0.0855 million cubic feet of natural gas
- (6) 1 kgal of No. 6 residual fuel oil = 0.0855 million cubic feet of natural gas
- (7) 1 kgal of waste oil (No. 4 recycled) = 0.0346 million cubic feet of natural gas

Therefore, the requirements of 326 IAC 2-7 will not apply.

D.1.5 No. 2 Distillate Fuel Oil Usage and Equivalents

The consumption of No. 2 distillate fuel oil (not to exceed 0.49% sulfur content) plus equivalent No. 2 distillate fuel oil consumption from back-up fuels, shall be limited to 2,764,300 gallons per twelve (12) consecutive month period. For the purposes of calculating equivalent No. 2 distillate fuel oil consumption from back-up fuels, the following conversion factors shall be utilized:

- (1) 1 kgal of No. 1 distillate fuel oil (not to exceed 0.48% sulfur) = 0.9796 kgal of No. 2 distillate fuel oil
- (2) 1 kgal of No. 4 residual fuel oil (not to exceed 0.70% sulfur) = 1.509 kgal of No. 2 distillate fuel oil
- (3) 1 kgal of No. 5 residual fuel oil (not to exceed 0.87% sulfur) = 1.963 kgal of No. 2 distillate fuel oil
- (4) 1 kgal of No. 6 residual fuel oil (not to exceed 1.34% sulfur) = 3.024 kgal of No. 2 distillate fuel oil
- (5) 1 kgal of waste oil (No. 4 recycled) (not to exceed 0.70% sulfur) = 1.479 kgal of No. 2 fuel oil

Therefore, the requirements of 326 IAC 2-7 will not apply.

Testing Requirements [326 IAC 2-8-4(3)]

D.1.6 Particulate Matter

During the period between 24 months and 36 months after issuance of this permit, the Permittee shall perform PM and PM10 testing utilizing methods per 40 CFR Part 60 Appendix A, Method 5, 17, 40 CFR Part 51 Appendix M, Method 201, 201a, 202, as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10.

D.1.7 Fuel Oil Sampling and Analysis

Oil samples shall be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted. The Permittee shall analyze the oil sample to determine the sulfur content of the oil in accordance with 326 IAC 3-3-4. If a partially empty fuel tank is refilled, a new sample and analysis is required upon filling. Vendor analysis of each load delivered is acceptable, in lieu of the above, if accompanied by a certification.

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.8 Pressure Readings

The Permittee shall take readings of the total static pressure drop across the baghouse controlling the mixing and drying operation, at least once a day when the mixing and drying process is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 6.0 inches of water. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of this range for any one reading.

Weekly (during operating season)

- (a) Check compressed air system for leaks.
- (b) Check duct work and baghouse housing for holes and air leaks.

Monthly (during operating season)

- (a) Check filter bags visually for leaks.
- (b) Check screw conveyor hanger bearings for wear and proper operations.
- (c) Check filter pulse system for proper operation.
- (d) Check exhaust fan drive belt tension.

Yearly (during the off season)

- (a) Check condition of bags to determine useful life remaining in bags.
- (b) Check baghouse structure and duct work for rust and worn places in steel.

Appropriate corrective actions shall be taken in accordance with Condition C.12.

D.1.12 Preventive Maintenance [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Condition B.13 of this permit, is required for this facility.

D.1.13 Waste Oil Firing

Pursuant to 329 IAC 3.1-11 (Standards for the management of specific hazardous wastes and specific types of hazardous waste management facilities), the waste oil burned in the aggregate dryer burner shall meet the used oil specifications in 40 CFR 266 (Standards for the management of specific hazardous wastes and specific types of hazardous waste management facilities), Subpart E (used oil burned for energy recovery), does not apply.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.14 Operational Parameters

The Permittee shall maintain a daily record for the baghouse controlling particulate matter emissions from asphalt mixing and drying operations of the following values:

- (a) Baghouse inlet temperature;
- (b) Inlet and outlet differential static pressure;
- (c) Visible observations;
- (d) Checklist with dates and initials for each preventive action performed; and
- (e) Records of corrective actions.

D.1.15 Fuel Usage and Equivalents

- (a) Complete and sufficient records shall be kept to establish compliance with the natural gas and natural gas equivalents usage limit, the No. 2 distillate fuel oil and equivalents usage limits, and sulfur dioxide emission limits established in this permit and these records shall contain a minimum of the following:
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Monthly natural gas usage plus equivalent natural gas usage from back-up fuels and monthly No. 2 distillate fuel oil usage plus equivalent No. 2 fuel oil usage from back-up fuels, and sulfur content;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and
 - (4) Fuel supplier certifications.
- (b) The supplier certification shall contain, as a minimum, the following:
 - (1) The name of the supplier; and
 - (2) A statement from the oil supplier that certifies the sulfur content and heat content of the fuel oil.

D.1.16 Quarterly Reporting

A quarterly summary to document compliance with operation Conditions D.1.5 and D.1.5a, shall be submitted to the address(es) listed in Section C.16 General Reporting Requirements, using the enclosed forms or their equivalent, within thirty (30) days after the end of the quarter being reported.

General Construction Conditions [326 IAC 2-1-3.2]

D.1.17 General Rule Applicability

This permit to construct the 135 MMBtu per hour dryer burner does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

D.1.18 Effective Date of the Permit [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

D.1.19 Revocation of Permits [326 IAC 2-1-9(b)]

Pursuant to 326 IAC 2-1-9(b) (Revocation of Permits), IDEM, OAM, may revoke this section of the approved permit if construction of the 135 MMBtu per hour dryer burner is not commenced within eighteen (18) months after receipt of this permit or if construction is suspended for a continuous period of one (1) year or more.

D.1.20 Modification of Construction Conditions

All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

D.1.21 First Time Operation Permit [326 IAC 2-1-4]

This document shall also become the first-time operation permit for the 135 MMBtu per hour dryer

burner, pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to:

Indiana Department of Environmental Management
Permit Administration & Development Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

verifying that the facilities were constructed as proposed in the application. The facilities covered in this section of this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) The permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT, COMPLIANCE DATA SECTION
FESOP Quarterly Report**

Source Name: Stoneco, Inc. Fort Wayne Drum Asphalt Plant
Source Address: 7320 Lower Huntington Road, Fort Wayne, Indiana 46809
FESOP No.: F003-5809-03281
Facility: 135 million British thermal units per hour burner for the aggregate batch mix dryer
Parameter: fuel consumption limitations
Limits:

The consumption of No. 2 distillate fuel oil (not to exceed 0.49% sulfur content) plus equivalent No. 2 distillate fuel oil consumption from back-up fuels, shall be limited to 2,764,300 U.S. gallons per twelve (12) consecutive month period. For the purposes of calculating equivalent No. 2 distillate fuel oil consumption from back-up fuels, the following conversion factors shall be utilized:

- (1) 1 kgal of No. 1 distillate fuel oil (not to exceed 0.48% sulfur) = 9.796e-1 kgal of No. 2 distillate fuel oil;
- (2) 1 kgal of No. 4 residual fuel oil (not to exceed 0.70% sulfur) = 1.509e+0 kgal of No. 2 distillate fuel oil;
- (3) 1 kgal of No. 5 residual fuel oil (not to exceed 0.87% sulfur) = 1.963e+0 kgal of No. 2 distillate fuel oil;
- (4) 1 kgal of No. 6 residual fuel oil (not to exceed 1.34% sulfur) = 3.024e+0 kgal of No. 2 dist. fuel oil; and
- (5) 1 kgal of re-refined waste oil (not to exceed 0.70% sulfur) = 1.479e+0 kgal of No. 2 dist. fuel oil.

Year: _____

Month	No. 2 (+ equivalents) usage this month (gallons per month)	No. 2 (+ equivalents) usage for last twelve months (gallons per twelve months)

- 9 No deviation occurred in this month.
9 _____ Deviation(s) occurred in this month.
Deviation(s) reported on: _____

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT, COMPLIANCE DATA SECTION
FESOP Quarterly Report**

Source Name: Stoneco, Inc. Fort Wayne Drum Asphalt Plant
Source Address: 7320 Lower Huntington Road, Fort Wayne, Indiana 46809
FESOP No.: F003-5809-03281
Facility: 135 million British thermal units per hour burner for the aggregate batch mix dryer
Parameter: fuel consumption limitations
Limits:

The consumption of natural gas plus equivalent natural gas consumption from back-up fuels, shall be limited to 356.7 million cubic feet per twelve (12) consecutive month period. For the purposes of calculating equivalent natural gas consumption from back-up fuels, the following conversion factors shall be utilized:

- (1) 1 kgal of No. 2 distillate fuel oil = 0.1265 million cubic feet of natural gas,
- (2) 1 kgal of liquefied petroleum gas = 0.0273 million cubic feet of natural gas
- (3) 1 kgal of No. 1 distillate fuel oil = 0.0437 million cubic feet of natural gas
- (4) 1 kgal of No. 4 residual fuel oil = 0.0855 million cubic feet of natural gas
- (5) 1 kgal of No. 5 residual fuel oil = 0.0855 million cubic feet of natural gas
- (6) 1 kgal of No. 6 residual fuel oil = 0.0855 million cubic feet of natural gas
- (7) 1 kgal of waste oil (No. 4 recycled) = 0.0346 million cubic feet of natural gas

Year: _____

Month	natural gas (+ equivalents) usage this month (MMCF per month)	natural gas (+ equivalents) usage for last twelve months (MMCF per twelve months)

9 No deviation occurred in this month.

9 _____ Deviation(s) occurred in this month.

Deviation(s) reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Significant Modification (SMF) to a Federally Enforceable State Operating Permit (FESOP) and Enhanced New Source Review

Source Background and Description

Source Name:	Stoneco, Inc.
Source Location:	7320 Lower Huntington Road, Fort Wayne, Indiana 46809
County:	Allen
FESOP No.:	F-003-5809-03281
Significant Modification No.:	SMF-003-9968
SIC Code:	2951
Permit Reviewer:	Janusz Johnson

A FESOP for a stationary drum hot mix asphalt plant was issued to Stoneco, Inc., on December 13, 1996. On July 23, 1998, Stoneco, Inc., submitted a request to construct and operate a 135 million British thermal unit per hour replacement dryer burner. Stoneco, Inc., has agreed to accept limits on the total regulated air pollutant emissions from the modified source such that the requirements of 326 IAC 2-7 (Part 70 Permit Program) will not apply, and that the requirements of Enhanced New Source Review (ENSR), 326 IAC 2-1-3.2, and Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21 are satisfied.

Permitted Emission Units and Pollution Control Equipment

There will be no change to the permitted emission units and pollution control devices at this source as a result of the proposed significant modification to the FESOP other than the removal of the existing 91 MMBtu per hour dryer burner.

New Emission Units and Pollution Control Equipment Requiring ENSR

The following new equipment shall be added to the source:

- (a) One (1) natural gas fired dryer burner with a maximum heat input of 135 million (MM) Btu per hour, using liquefied petroleum gas (LPG), No. 1 distillate fuel oil, No. 2 distillate fuel oil, No. 4 residual fuel oil, No. 5 residual fuel oil, No. 6 residual fuel oil and re-refined waste oil as back-up fuels.

Insignificant Activities

There will be no change to the insignificant activities at this source as a result of the proposed significant modification to the FESOP.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the significant modification to the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application for the FESOP and additional information submitted by the applicant.

A letter requesting the significant modification for the purposes of this review was received on July 23, 1998.

Emission Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (5 pages).

Total Potential and Allowable Emissions

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Allowable Emissions (tons/year)	Potential Emissions (tons/year)
Particulate Matter (PM)	131	131
Particulate Matter (PM10)	109	109
Sulfur Dioxide (SO ₂)	798	798
Volatile Organic Compounds (VOC)	4	4
Carbon Monoxide (CO)	24	24
Nitrogen Oxides (NO _x)	325	325

- (a) The potential emissions before control are the same as the allowable emissions, therefore, the potential emissions before control are used for the permitting determination.
- (b) Allowable emissions (as defined in the Indiana Rule) of particulate matter (PM), sulfur dioxide (SO₂), and nitrogen oxides (NO_x) are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit (Enhanced New Source Review (ENSR)) is required.

Limited Potential to Emit

The source has accepted federally enforceable limits for nitrogen oxides (NO_x), sulfur dioxide (SO₂) and volatile organic compounds (VOC) of 99 tons per year per pollutant. Based on the request to modify the FESOP, the limitation on combustion of fuel oils (Condition D.1.5 of the FESOP) has been revised to account for a change in emission factors for the new, larger, dryer burner. Additionally, a new limitation on the combustion of natural gas (Condition D.1.5a of the FESOP) has been added to account for a change in emission factors for the new, larger, dryer burner.

The table on the next page summarizes the revised total potential to emit, reflecting all limits, of the significant emission units.

	Limited PTE (tons/year)							
Facility:	PM *	PM-10 *	SO ₂	VOC	CO	NO _x	total HAPs	worst case single HAP
dryer and burner	79.3	95.9	96.2	11.5	7.1	98.1	8.8	3.4
hot oil heater	0.1	0.1	2.8	0.0	0.2	0.9	0.0	0.0
conveying	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0
unpaved roads	7.5	2.6	0.0	0.0	0.0	0.0	0.0	0.0
storage	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
cold mix storage	0.0	0.0	0.0	87.5	0.0	0.0	0.0	0.0
Total Emissions	87.6	99.0	99.0	99.0	7.3	99.0	8.8	3.4

* Note: Limited PM/PM10 PTE levels have been revised to reflect the as limited PTE's rather than the controlled potential emissions. Based on differences in the testing methods which demonstrate compliance for PM and PM-10 limitations, the PM-10 limitation pursuant to 326 IAC 2-8-4 is greater than the PM limitation pursuant to 326 IAC 12, 40 CFR 60.90, (based on 80,000 acfm) because it includes the condensable portions in addition to filterable PM-10.

County Attainment Status

The source is located in Allen County.

Pollutant	Status
TSP	attainment or unclassifiable
PM-10	attainment or unclassifiable
SO ₂	attainment or unclassifiable
NO ₂	attainment or unclassifiable
Ozone	attainment or unclassifiable
CO	attainment or unclassifiable
Lead	attainment or unclassifiable

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

There are no changes to the applicability of Federal Rules due to the proposed significant modification to the FESOP.

State Rule Applicability

There are no changes to the applicability of State Rules due to the proposed significant modification to the FESOP.

Compliance Requirements

There are no changes to the compliance monitoring or record keeping and reporting requirements for the source as a result of the proposed significant modification to the FESOP.

Limiting Conditions

The federally enforceable limitation on combustion of fuel oil (Condition D.1.5) has been modified to account for differences in emission factors between the old burner and the new one, and the fuel equivalence ratios based on sulfur dioxide emissions have been revised accordingly.

A new federally enforceable limitation on combustion of natural gas (Condition D.1.5a) has been added to the FESOP to account for the differences in emission factors between the old burner and the new one, and new fuel equivalence ratios based on nitrogen oxides emissions have been added.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

There is no change in the potential to emit (PTE) hazardous air pollutants from the source as a result of the proposed significant modification to the FESOP.

Conclusion

The operation of this new aggregate dryer burner and the existing drum mix asphalt plant shall be subject to the conditions of the attached proposed **Significant Modification to the FESOP No. SMF-003-9968**.

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for New Construction and Operation

Source Name:	Stoneco, Inc.
Source Location:	7320 Lower Huntington Road, Fort Wayne, Indiana 46809
County:	Allen
FESOP No.:	F-003-5809-03281
Significant Modification No.:	SMF-003-9968
SIC Code:	2951
Permit Reviewer:	Janusz Johnson

On October 10, 1998, the Office of Air Management (OAM) had a notice published in the *Fort Wayne Journal Gazette*, Fort Wayne, Indiana, stating that Stoneco, Inc., had applied for a construction permit to construct and operate a 135 million British thermal unit per hour replacement dryer burner. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On November 2, 1998, Stoneco, Inc. submitted comments on the proposed construction permit. The summary of the comments and corresponding responses is as follows (changes are bolded for emphasis):

Comment 1: The Responsible Official for the company has been changed to be Mic Dwyer. The reference to this on the revised Page 4 of 31 of the Significant Modification to the FESOP should be corrected to reflect this change.

Response 1: The description of the sources general information on the revised Page 4 of 31 of the Significant Modification to the FESOP shall be corrected as follows to reflect the correct Responsible Official:

A.1 General Information

The Permittee owns and operates a drum hot mix asphalt plant.

Responsible Official:	Jerry Willman Mic Dwyer
Source Address:	7320 Lower Huntington Road, Fort Wayne, Indiana 46809
Mailing Address:	201 South Thomas Road, Fort Wayne, Indiana 46808
SIC Code:	2951
County Location:	Allen
County Status:	Attainment for all criteria pollutants
Source Status:	Synthetic Minor Source, FESOP Program

Comment 2: The plant's production capabilities will limit the use of the burner to 84.1 million British thermal units per hour. The maximum size of the burner cannot be utilized without increasing the size of the plant. The description of the burner should be changed to reflect 84.1 million British thermal units per hour as the burner size.

Response 2: The potential emissions from a facility are based on that emission unit's maximum rated capacity. In this case, the new dryer burner is capable of a heat input rate of 135 million British thermal units per hour. Further discussion with Stoneco has led to the conclusion that while there are no plans to fire the burner at its maximum capacity, its full potential could be utilized at any time if desired (e.g. a cold wet day). Additionally, there is a significant increase in the nitrogen oxides (NO_x) emission factor for burner sizes greater than 100 million British thermal units per hour. The OAM believes that the permit should reflect the maximum capacity of the replacement burner and that the fuel consumption limitation for the burner should be based on the higher emission factors associated with this size. Therefore, no change has been made as a result of this comment.

Comment 3: The description in item (d) of Section A.3 (Insignificant Activities) states that there are two (2) materials testing labs. This is incorrect as there is only one (1) such lab at this plant.

Response 3: Section A.3 (Insignificant Activities) Item (d) on the revised Page 4 of 31 of the Significant Modification to the FESOP shall be changed as follows:

(d) ~~two (2)~~ **one (1)** materials testing labs.